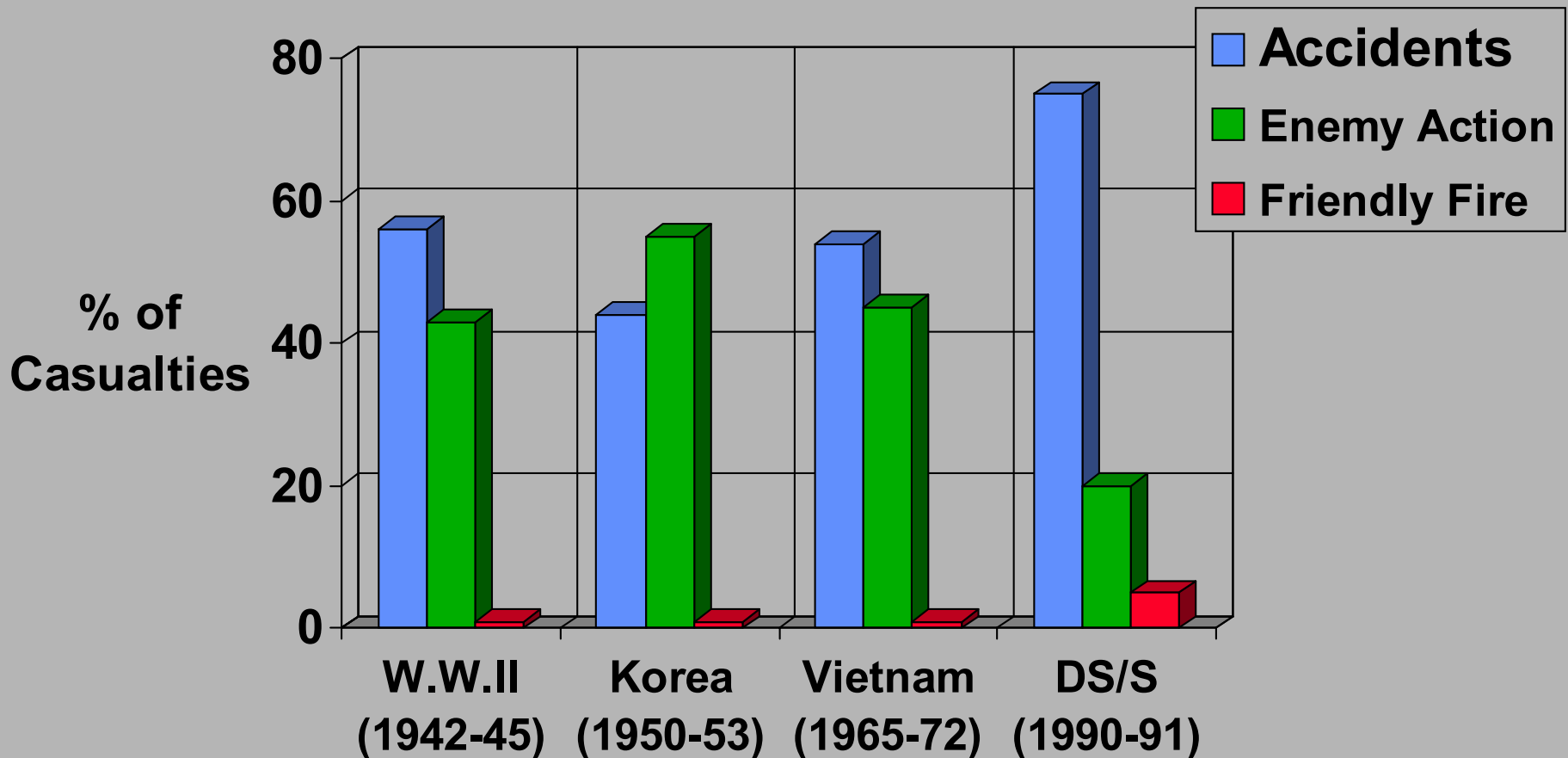


RISK MANAGEMENT



Copyright © 1999 United Feature Syndicate, Inc.
Redistribution in whole or in part prohibited

Battle & Non-Battle Casualties



Accident

Causes or Contributing Factors

Human Error - individual actions or performance is different than what is required

Material Failure/Malfunction - fault in equipment keeps it from working as designed

Environmental Conditions - natural or manmade surroundings that negatively affect performance of individuals, equipment or materials

Sources of Cause Factors

**Individual
Failure**

**Leader
Failure**

**Standards
Failure**

**Training
Failure**

**Support
Failure**

Sources of Cause Factors

Individual Failure - Soldier is trained & knows standard but elects not to follow the standard (*self-discipline*).

Leader Failure - Leader does not enforce known standard.

Training Failure - Soldier not trained to standard (*insufficient, incorrect, or no training on task*).

Standards Failure - Standards/procedures not clear or practical, or do not exist.

Support Failure - Equipment/material improperly designed, not provided, or unserviceable.

Current Command Environment

- ✓ Budget Reductions
- ✓ Deteriorating Infrastructure
- ✓ More with less
- ✓ Environmental and Safety Legal Considerations
- ✓ Increased People Scrutiny

Key Definitions

Hazard - any real or potential condition that can cause:

- injury, illness or death of personnel
- damage to, or loss of equipment/property
- mission degradation.

Risk - chance of hazard or bad consequences; exposure to chance of injury or loss.

Controls - actions taken to eliminate hazards or reduce their risk(s).

Risk Management vs. Risk Assessment

Risk Management - the process of identifying and controlling hazards to protect the force.

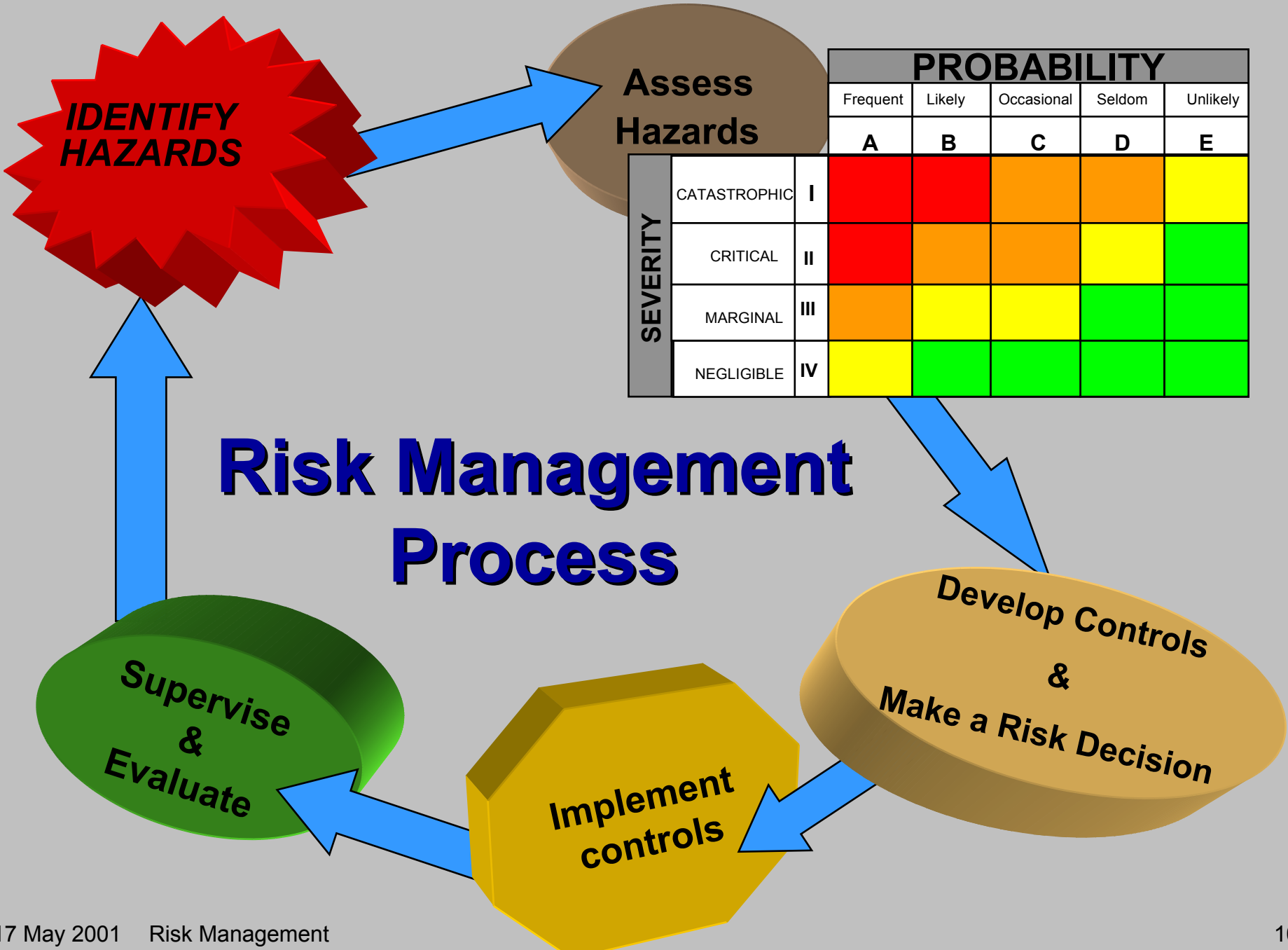
- **A 5-step cyclic process that is easily integrated into the decision-making process (FM 101-5)**

Risk Assessment - *(first two steps of the Risk Management process)*. The process of developing information versus acting upon that information.

Risk Management Principles

- ✓ Integrate risk management into **mission planning, preparation, and execution.**
- ✓ Accept no unnecessary risks.
- ✓ Make risk decisions at the appropriate level in the chain of command.





Risk Management Worksheet

A. Mission/Task:		B. Date/Time Group: Begin: End:		C. Date Prepared:	
D. Prepared By:					
E. Task	F. Hazards	G. Assess Hazards	H. Develop Controls	I. Residual Risk	J. Implement Controls
K. Overall mission/task risk level after controls are implemented: <div> <div>LOW (L)</div> <div>MODERATE (M)</div> <div>HIGH (H)</div> <div>EXTREMELY HIGH (E)</div> </div> Who has Risk Decision Authority for Risk Level identified?					

Risk Management Process – Step 1 -

Potential sources of danger that could be encountered while performing a task or mission.



- ✓ Identify those hazards which have the potential to change such as:
 - Weather
 - Level of supervision
 - Soldier alertness
 - Terrain
 - Equipment condition

Hazard Detection Tools

METT-TC

Judgment

**Historical Lessons
Learned**

**Environmental
Considerations**

Experience

Hazard Detection Tools

METT-TC

Mission - Specified, implied & subtasks

Enemy - Size & capability (SALUTE)

Terrain/Weather - Environmental conditions

Troops & Equipment

- ✓ Troops - training, type, number, physical condition
- ✓ Equipment - amount, type, design, condition

Time Available - Plan, rehearse, & conduct

Civilians

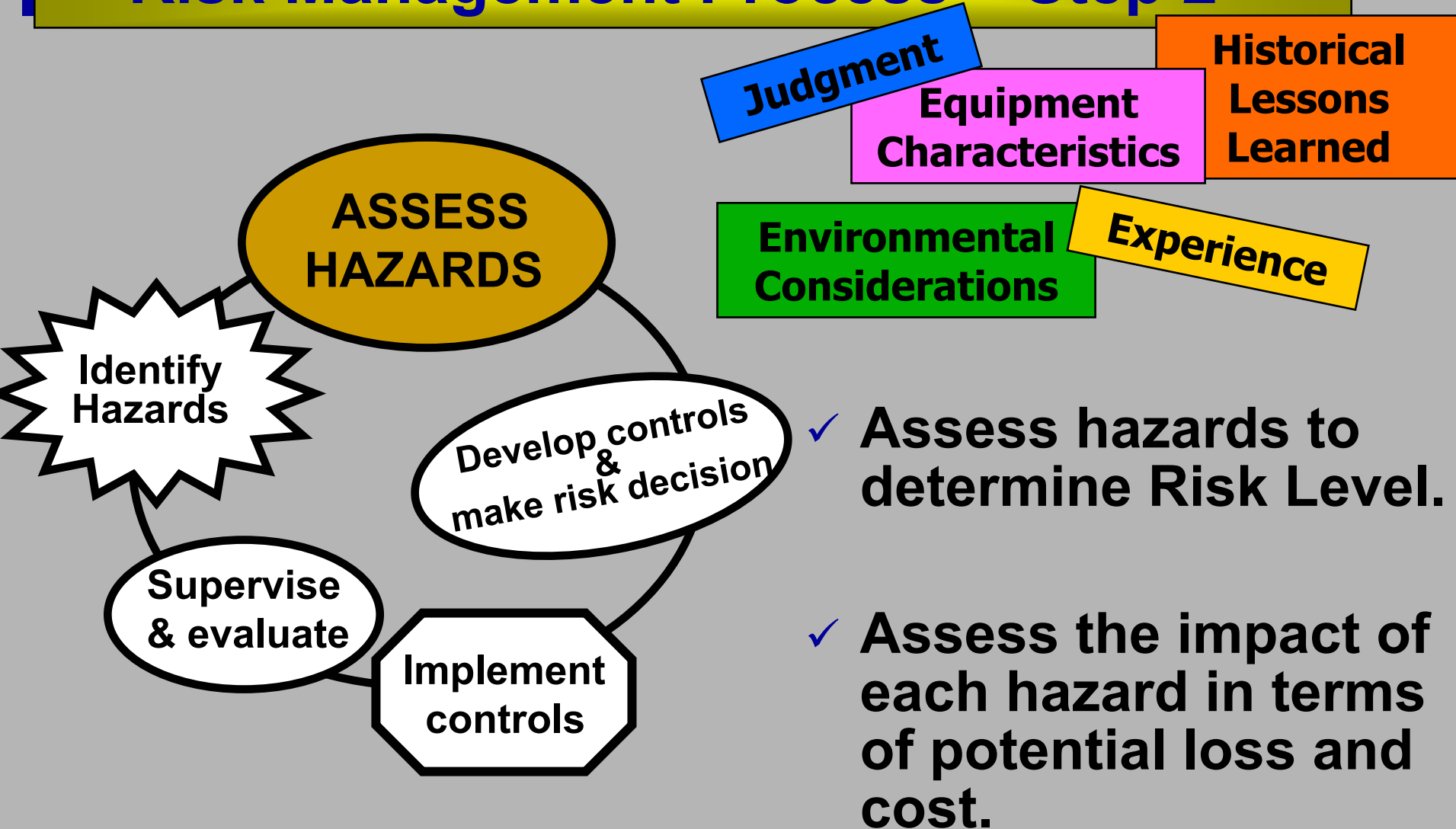
- ✓ mission interference
- ✓ affected by mission

Risk Management Worksheet

Identify the Hazard(s)

A. Mission/Task Re-deploy from Log Warrior training site		B. Date/Time Group: Begin: 24 May 01 End: Sep 01		C. Date Prepared: 22 May 01	
D. Prepared By: CPT Joe Snuffy, Safety Officer					
E. Tasks or Steps	F. Hazards	G. Assess Hazards	H. Develop Controls	I. Residual Risk	J. Implement Controls
March trainees from TA-5 to BDE area	Fast moving traffic on River Rd & RT 36 resulting in SM being hit by vehicle Heat Injuries Fatigue & existing injuries				
K. Overall mission/task risk level after controls are implemented: <div> LOW (L) MODERATE (M) HIGH (H) EXTREMELY HIGH (E) </div> Who has Risk Decision Authority for Risk Level identified?					

Risk Management Process – Step 2 -



Key Definitions

Risk Level is expressed in terms of hazard probability and severity.

- **Probability** - The likelihood that an event will occur.
- **Severity** - The expected consequence of an event in terms of degree of injury, property damage, or other mission impairing factors.

PROBABILITY				
Frequent	Likely	Occasional	Seldom	Unlikely

Frequent - Occurs often; continuously experienced.

Likely - Occurs several times.

Occasional - Occurs sporadically.

Seldom - Remotely possible; could occur at some time.

Unlikely - Can assume it will not occur.

Severity

SEVERITY	Catastrophic	I	Mission Failure; Death or permanent disability; Major equipment/system loss; Major property damage; Unacceptable collateral damage; Severe environ damage ...
	Critical	II	Severely degraded mission capability or unit readiness; Permanent partial disability; Temp total disability > 3 mo.; Major equipment damage; Security failure; Significant collateral damage ...
	Marginal	III	Minor injury; lost workday; compensable injury/illness; minor system, equipment, property or environmental damage ...
	Negligible	IV	Little/no impact on mission; First aid or minor supportive medical treatment; minor system impairment; Slight equipment damage; Little/no property or environmental damage

Risk Assessment Matrix

E = Extremely High Risk H = High Risk M = Moderate Risk L = Low Risk			PROBABILITY				
			Frequent	Likely	Occasional	Seldom	Unlikely
			A	B	C	D	E
S E V E R I T Y	CATASTROPHIC	I	E	E	H	H	M
	CRITICAL	II	E	H	H	M	L
	MARGINAL	III	H	M	M	L	L
	NEGLIGIBLE	IV	M	L	L	L	L

Risk Management Worksheet

Assess the Hazard(s)

A. Mission/Task: Re-deploy from Log Warrior training site		B. Date/Time Group: Begin: 24 May 01 End: Sep 01		C. Date Prepared: 22 May 01					
D. Prepared By: CPT Joe Snuffy, Safety Officer									
E. Task	F. Hazards	G. Assess Hazards	H. Develop Controls	I. Residual Risk	J. Implement Controls				
March trainees from TA-5 to BDE area	Fast moving traffic on River Rd & RT 36 resulting in SM being hit by vehicle Heat Injuries Fatigue & existing injuries	I-B Extremely High (E) I-C High (H) III-C Moderate (M)	PROBABILITY						
			Frequent Likely Occasional Seldom Unlikely						
			A B C D E						
			SEVERITY	CATASTROPHIC I					
				CRITICAL II					
				MARGINAL III					
NEGLECTIBLE IV									
K. Overall mission/task risk level after controls are implemented: <div style="display: flex; justify-content: space-around; margin-top: 10px;"> LOW (L) MODERATE (M) HIGH (H) EXTREMELY HIGH (E) </div> Who has Risk Decision Authority for Risk Level identified?									

Risk Management Process – Step 3 -

Control measures eliminate the hazard or reduces its risk.

- ✓ Engineering
- ✓ Training
- ✓ Enforcement



Develop Courses of Action (COA)



WHO

WHAT

WHEN

WHY

WHERE

HOW

benefit potential cost.

Maintaining Control to Prevent Human Error

Adequate
YES NO

**Identified
METT-TC
hazard**

Support: Is type/amount/capability/condition of support provided and sufficient to control hazard? - Personnel - Equipment/material - Supplies - Services/facilities		X
Standards: Is guidance/procedures available and clear/practical/specific to control hazard?	X	
Training: Is training available, complete and sufficient to control hazards and perform tasks?	X	
Leader: Are leaders ready, willing and able to enforce standards required to control hazard?	X	
Individual: Is soldier performance and conduct sufficiently self-disciplined to control hazard?	X	

“YES”

**No action
required**

“NO”

**Risk Manage this
HAZARD**

Key Definitions

Residual Risk - The level of risk **remaining** after controls have been identified and selected.

		PROBABILITY				
		Frequent	Likely	Occasional	Seldom	Unlikely
		A	B	C	D	E
SEVERITY	CATASTROPHIC I					
	CRITICAL II					
	MARGINAL III					
	NEGLIGIBLE IV					

Risk Decision - The decision to accept or not accept the risk(s) associated with an action.

- ✓ Made by the commander, leader, or the individual responsible for performing that action.

Risk Decision

Must be made at a level that corresponds with the degree of risk.

Extremely High Risk:

TRADOC CG; DCG; or CofS

High Risk:

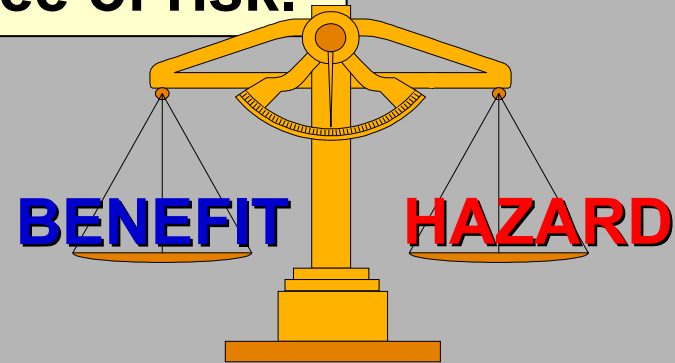
General Officer level Commander

Moderate Risk:

COL/O6 Commander or equivalent in the Chain of Command of Unit/Organization involved

Low Risk:

Person in charge; designated by commander



Risk Management Worksheet

Develop Risk Assessment & Make Risk Decision

PROBABILITY				
Frequent	Likely	Occasional	Seldom	Unlikely
A	B	C	D	E

SEVERITY	CATASTROPHIC	I								
	CRITICAL	II								
	MARGINAL	III								
	NEGLIGIBLE	IV								

Time Group:

May 01 End: Sep 01

C. Date Prepared:

22 May 01

H. Develop Controls

I. Residual Risk

J. Implement Controls

March trainees from TA-5 to BDE area

Fast moving traffic on River Rd & RT 36 resulting in SM being hit by vehicle

I-B Extremely High (E)

Heat Injuries
Fatigue & existing injuries

I-C High (H)
III-C Moderate (M)

1.Exit TA-5 from West side of training area leading into family housing.
2.Post MPs/road block to stop traffic on East & West bound RT 36 near housing entrance and 19th Street.
3.Cadre & road guards wear reflective vests.

I-E Moderate (M)

III-E Low (L)

IV-D Low (L)

K. OVERALL mission/task Risk Level after controls are implemented:

LOW (L)

MODERATE (M)

HIGH (H)

EXTREMELY HIGH (E)

Who has Risk Decision Authority for Risk Level identified? COL Jane Wayne, BDE Commander

Risk Management Process – Step 4 -

"How To" ...Leaders must explain how supervisors will implement controls



Apply coordination & communication

- ✓ Identify SOPs & other documents
- ✓ Written or Verbal Orders
- ✓ Mission Briefs
- ✓ Rehearsals
- ✓ Training
- ✓ Inspections

Risk Management Worksheet

Implement Controls – “How To”

A. Mission/Task: Re-deploy from Log Warrior training site		B. Date/Time Group: Begin: 24 May 0 End: Sep 01		C. Date Prepared: 22 May 01	
D. Prepared By: CPT Joe Snuffy, Safety Officer					
E. Task	F. Hazards	G. Assess Hazards	H. Develop Controls	I. Residual Risk	J. Implement Controls
March trainees from TA-5 to BDE area	Fast moving traffic on River Rd & RT 36 resulting in SM being hit by vehicle	I-B Extremely High (E)	1.Exit TA-5 from North side of training area leading into family housing. 2.Post MPs/road block to stop traffic on East & West bound RT 36 near housing entrance and 19 th Street. 3.Cadre & road guards wear reflective vests.	I-E Moderate (M)	1.Log Warrior OPORD (Apr 01). 2.Coordinate MP support through Provost Marshal. 3.Post MPs & road block support on site 30 minutes prior to march SP. 4.Inspect formation prior to movement.
K. Overall mission/task risk level after controls are implemented: <div style="display: flex; justify-content: space-around; align-items: center;"> LOW (L) MODERATE (M) HIGH (H) EXTREMELY HIGH (E) </div> Who has Risk Decision Authority for Risk Level identified? COL Jane Wayne, BDE Commander					

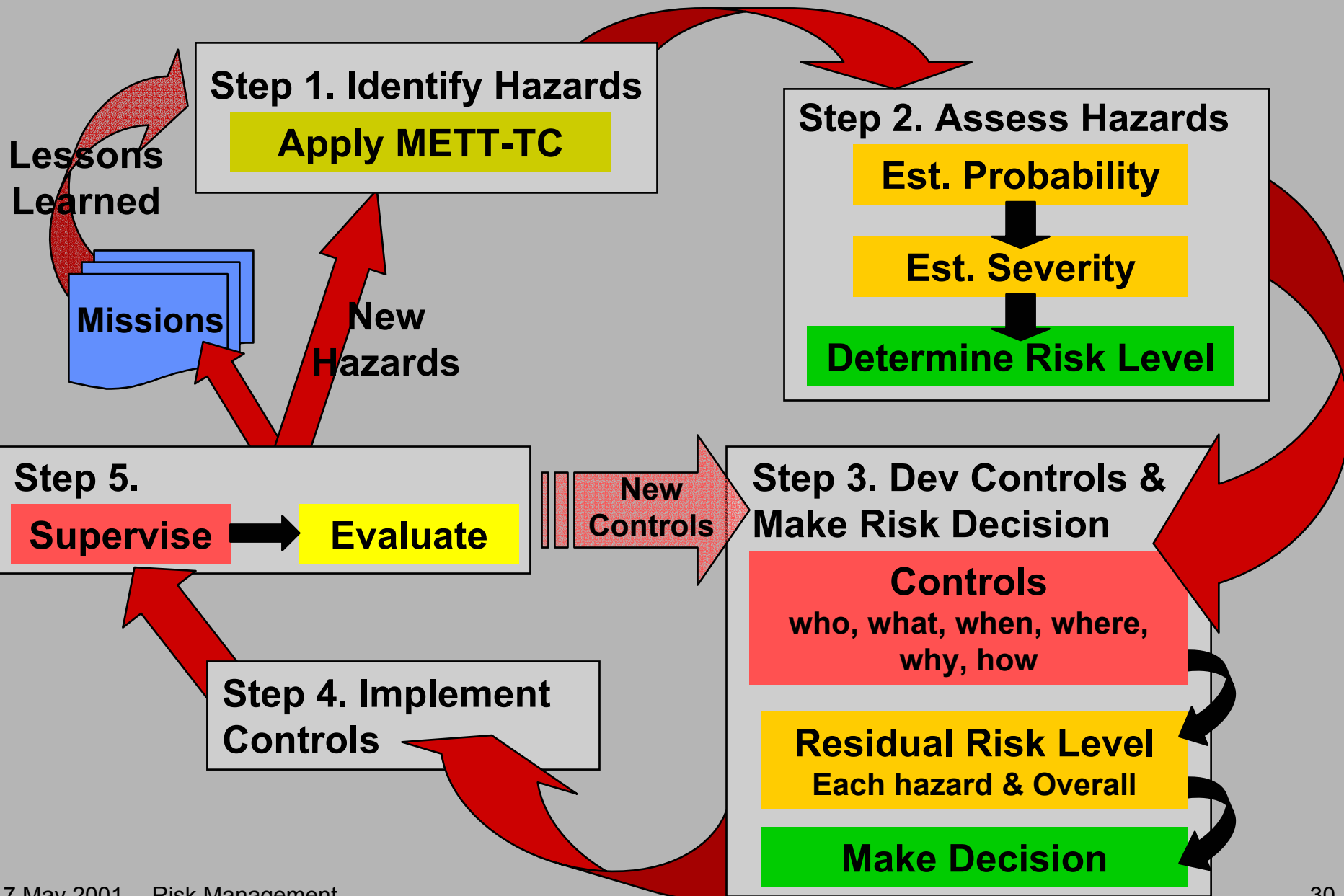
Risk Management Process – Step 5 -

Supervision goes beyond ensuring that personnel do what is expected of them. It includes following up **during** and **after** an action.



- ✓ **Perform to, and enforce standards and controls.**
- ✓ **Evaluate the effectiveness of controls.**
- ✓ **Adjust / update as necessary.**
- ✓ **Incorporate lessons learned for future use.**

Continuous Application of Risk Management



DON'T STOP NOW!

RISK MANAGEMENT WORKSHEET

A. Mission/Task:

Re-deploy from Log Warrior training site

B. Date/Time Group:

Begin: 24 May 01 **End:** Sep 01

C. Date Prepared:

22 May 01

D. Prepared By: CPT Joe Snuffy, Safety Officer

E. Task	F. Hazards	G. Assess Hazards	H. Develop Controls	I. Residual Risk	J. Implement Controls
March trainees from TA-5 to BDE area	Fast moving traffic on River Rd & RT 36 resulting in SM being hit by vehicle	I-B Extremely High (E)	1.Exit TA-5 from North side of training area leading into family housing. 2.Post MPs/road block to stop traffic on East & West bound RT 36 near housing entrance and 19 th Street. 3.Cadre & road guards wear reflective vests.	I-E Moderate (M)	1.Log Warrior OPORD (Apr 01). 2.Coordinate MP support through Provost Marshal. 3.Post MPs & road block support on site 30 minutes prior to march SP. 4.Inspect formation prior to movement.
	Heat Injuries	I-C High (H)		III-E Low (L)	
	Fatigue & existing injuries	III-C Moderate (M)		IV-D Low (L)	

K. Overall mission/task risk level after controls are implemented:

LOW (L)

MODERATE (M)

HIGH (H)

EXTREMELY HIGH (E)

Who has Risk Decision Authority for Risk Level identified? COL Jane Wayne, BDE Commander

RISK MANAGEMENT WORKSHEET

A. Mission/Task:

Re-deploy from Log Warrior training site

B. Date/Time Group:

Begin: 24 May 01 **End:** Sep 01

C. Date Prepared:

22 May 01

D. Personnel:

Snuffy, Safety Officer

E. Task:

G. Assess Hazards

H. Develop Controls

I. Risk

Applied Risk Management Process

NOT STATIC

Heat Injuries

Fatigue & existing injuries

I-C High (H)

III-C Moderate (M)

housing.

2.Post MPs/road block to stop traffic on East & West bound RT 36 near housing entrance and 19th Street.

3.Cadre & road guards wear reflective vests.

III-E Low (L)

IV-D Low (L)

5.Post MPs & road block support on site 30 minutes prior to march SP.
4.Inspect formation prior to movement.

K. Overall mission/task risk level after controls are implemented:

LOW (L)

MODERATE (M)

HIGH (H)

EXTREMELY HIGH (E)

Who has Risk Decision Authority for Risk Level identified? COL Jane Wayne, BDE Commander

Complete a Daily Risk Assessment Checklist

Documents the 5-Step Risk Management Process



- ✓ Covers items that change
- ✓ Completed immediately before mission/task/event is executed
- ✓ Identifies new hazards not addressed on the RM Worksheet

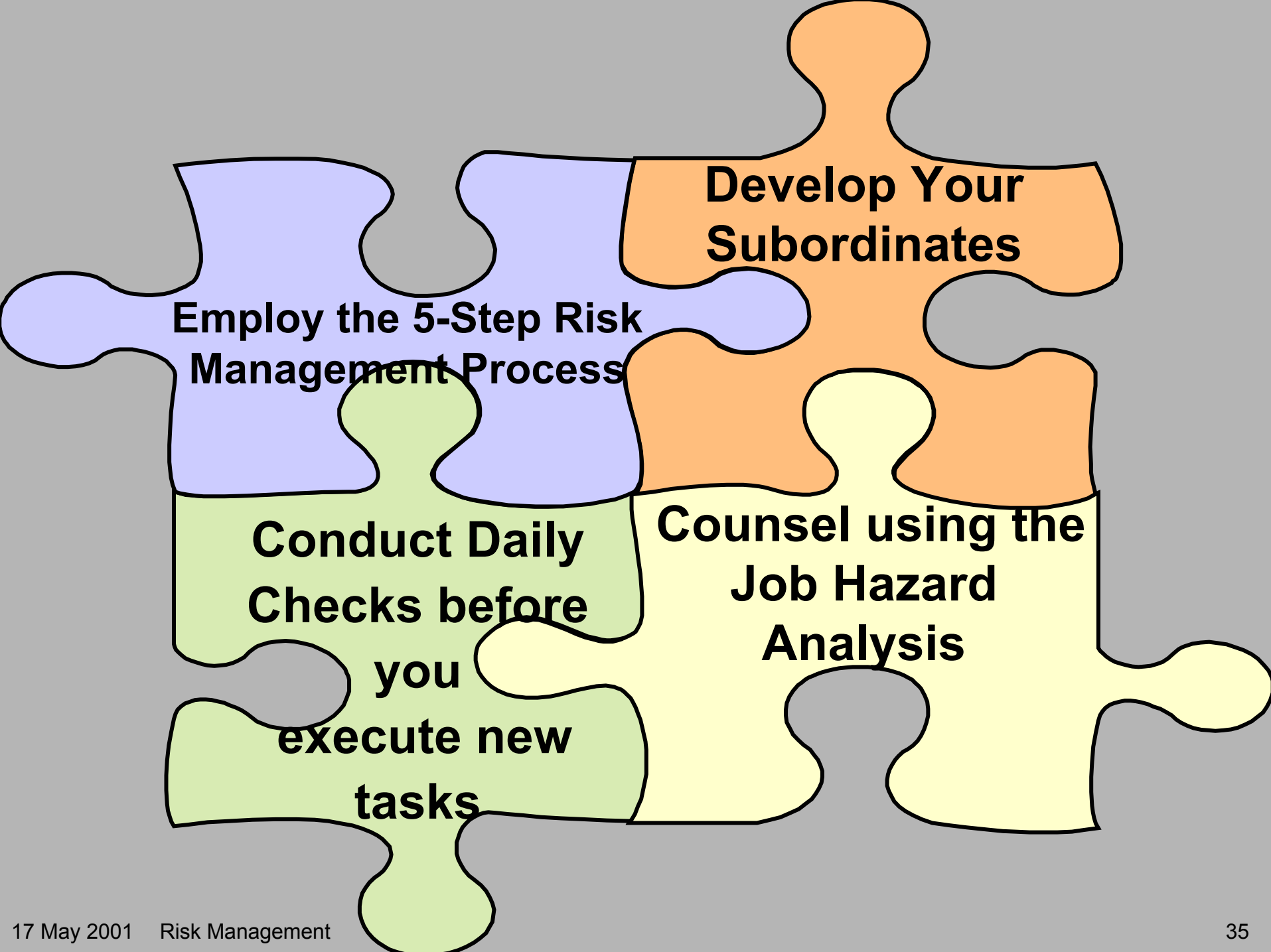
Serves as a final check to ensure the safety of the operation.

DAILY RISK ASSESSMENT CHECKLIST

OPERATION/TASK: _____ DATE: _____
 UNIT: _____ PREPARED BY: _____

FACTOR	RISK LEVEL			
	EXTREME	HIGH	MEDIUM	LOW
Planning Guidance	None	Vague	Implied	Specific
Preparation Time	None	Minimal	Adequate	Extensive
Task Complexity	Extreme	Moderate	Routine	Simple
Medical Support	None	First Aid Trained	Combat Lifesaver	Medic or 911 accessible
Leader/cadre Presence	None	Minimal	Substantial	Full Time
Instructor – Student Ratio	student count $\geq 3X$	student count $\geq 2X$	student count $\geq 1X$	meets requirement
Leader Experience	<1 Month	1 - 6 Months	7 - 18 Months	>18 Months
Instructor Experience	No IDC & no experience for task	Some experience; on-site <2 class rotations	Some experience; on-site <3 class rotations	Oriented to site; ≥ 2 class rotations
Ldr Rest In Prev 24 Hours	< 2 Hours	2-4 Hours	5 - 7 Hours	7 Hours
SM Rest In Prev 24 Hours	< 2 Hours	2-4 Hours	5 - 7 Hours	7 Hours
SM Physical Condition	Poor	Marginal	Adequate	Excellent
Personnel Experience	<1 Month	1 - 6 Months	7 - 18 Months	>18 Months
Trainees' Experience	First Exposure	Visual instruction only; No hands-on	Some hands-on	Experienced/ Practiced
Heat	Category V	Category IV	Category II & III	\leq Category I

Are ALL Controls Listed on the Risk Management Worksheet in Place?	YES	NO
Is Support, Safety, and Personal Protective Equipment Available and Serviceable?	YES	NO
Are there Hazards Present which are NOT Listed on the Risk Management Worksheet	YES	NO



**Employ the 5-Step Risk
Management Process**

**Develop Your
Subordinates**

**Conduct Daily
Checks before
you
execute new
tasks**

**Counsel using the
Job Hazard
Analysis**



Assess
Hazards

		PROBABILITY				
		Freq	Lkly	Occ	Seld	Unkly
		A	B	C	D	E
VERITY	CATASTRO	I				
	CRITICAL	II				
		III				

‘Risk management is the Army’s principal risk-reduction process to protect the force. Our goal is to make risk management a routine part of planning and executing operational missions.’

Chief of Staff, Army, July 1995

